



Section 5.6

Activity 5.6.1

1. 'Research and development' (R&D) is the scientific research and technical development of new products and processes.
2.
 - a. Total revenue in 2013 for Toyota = \$265B.
 - b. Total revenue in 2013 for Volkswagen = \$237B.
3. Reasons why different industries might spend such large sums on research and development include:
 - To develop new products to be competitive
 - To develop new products to attract consumers
 - To develop new systems to reduce unit costs.

Activity 5.6.2

1. A process change innovation for Aviva might be developing an app for consumers.
2. A product change innovation for Aviva might be cycling insurance as the market for cycling grows.
3. A positioning change innovation for Aviva might be into insurance for a new technology product like mobile phones.
4. A paradigm change innovation for Aviva might be providing financial education for university students.

Activity 5.6.3

1. One adaptive creative product that might not be innovatively creative is the Airbus 380 because it is just the adaptation of an airplane that already exists.
2. iTunes is innovatively creative because it is a completely new way of accessing music.
3. One further adaptive creativity example could be on-demand TV, where users can access programmes that have already been shown. This is an important selling point for the Sky TV television platform.



Activity 5.6.4

1. A 'trademark' is a symbol, mark or logo that clearly identifies the product in the market.
2. Innovative products can add to the value of Gillette because it creates brand loyalty. Long-term consumers who keep buying Gillette's products add to the value of the business.
3. Reasons why Gillette spends large amounts of money on R&D might include:
 - To give it a competitive edge
 - To attract new consumers
 - It allows Gillette to produce its products more cheaply.

Exam practice question

1. 'Innovation' is the practical application of new inventions into marketable products.
2. Adaptive creativity is minor incremental or adaptive improvements to a product. Innovative creativity means developing a product that transforms what is available to the consumer.
3. Factors that might have affected the R&D strategies used by Amazon and Volkswagen include:
 - Innovation by competing firms
 - Advances in technology
 - Finance available to them.
4. Advantages to Amazon and Volkswagen of spending large amounts of money on R&D include:
 - Keeps them ahead of, or up with, the competition
 - Develops new products to attract consumers
 - Reduces unit costs if it increases productivity
 - Allows them to diversify into new markets.

The disadvantages might be:

- Cost of funds used
- Some R&D fails
- Profits from R&D takes a long time to generate
- Investors interested in short-term returns.



Key concept question

How business strategy affects R&D:

- Importance of innovation in strategy in terms of developing new products and production systems
- Dynamic nature of the market means firms need to innovate to keep up with changing consumer demand
- R&D by competing firms makes a business innovate to keep up and maintain market share
- Increasing importance of technology in the market means firms have to innovate because products and production systems change so quickly
- How quickly management wants to see profits from innovation. Some innovation has a long payback time.
- Importance of change in strategy. The culture of some firms is to constantly strive through change, while others change little.